

ABSTRACT OF THE DISCLOSURE

A hydrodynamic type oil-impregnated sintered bearing comprising a porous bearing body of sintered metal having a bearing surface in which hydrodynamic pressure generating grooves slating against an axial direction are provided. Lubricating oil or the base oil of lubricating grease to be impregnated into the bearing body is selected from among (a) mixtures of poly- $\alpha$ -olefin or hydrogenated compound thereof and ester and (b) ester. The compounding ratio of poly- $\alpha$ -olefin or hydrogenated compound thereof to ester preferably ranges from 95:5 to 0:100 in weight ratio. The ester is preferably polyol ester. In the cases of the lubricating grease, the thickener of the lubricating grease is preferably composed of urea compound selected from the group shown in the following formula:  $R_1-NHCONH-R_2-NHCONH-R_3$ , where  $R_2$  represents an aromatic hydrocarbon group ranging from 6 to 15 in carbon atomicity,  $R_1$  and  $R_3$  represent an aromatic hydrocarbon group ranging from 6 to 12 in carbon atomicity or an alkyl group ranging from 8 to 20 in carbon atomicity. A plurality of bearing surfaces may be formed on the inner periphery of the bearing body so as to be separated one another. In this case, the inner diameters of the bearing body at areas between the bearing surfaces are arranged to be greater than those at areas on the bearing surfaces except the hydrodynamic pressure generating grooves. The hydrodynamic type oil-impregnated sintered bearing is suitably applied to a spindle motor for information

